

A Critical Appraisal of the Legal Regime for Biodiversity Conservation in Nigeria

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Received 4 March 2012; accepted 17 June 2012

Abstract

Nigeria harbours a peculiar and an uncertain environmental situation taking into cognizance the desert encroachment in the North and the rise of sea level leading to flooding in the South, which calls for a well articulated, accelerated, and organized remedial action plan on the conservation of Biodiversity. Several species of fauna and flora which the country is naturally endowed with have been rendered extinct or are in danger of extinction as a consequence of economic growth and development.

On the international scene the situation is not better with current trends like climate change which has greatly affected the distribution and extinction of species of flora and fauna, ecosystems as well as man and his environment. The earth surface which is full of a diversity of plants and animals currently estimated at about 1.7 million known species are yet greatly threatened by biodiversity loss, erosion, depletion of genes and global species constitute an important concern to national and international authorities.

The objective of this paper is to examine the legal regimes on the conservation of biodiversity at the global level, equally Nigeria as a global player has domesticated these regimes into its national laws in a bid to ensure the conservation of biodiversity within the country. We are also going to examine the causes and effects of the loss of biodiversity, the relationship between biodiversity conservation and the fight against climate change.

In this paper, judicial decisions, statutes, international treaties as well as official records on the conservation of

biodiversity form the primary sources while secondary sources such as textbooks, journals, official proceedings, specialized publications and conference papers were equally utilized. The paper will be crowned with some recommendations proffered from the writers' perspective and a conclusion.

Key words: Biodiversity; Conservation; Legal regime; Nigeria

Olubisi F. Oluduro, Gideon N. Gasu (2012). A Critical Appraisal of the Legal Regime for Biodiversity Conservation in Nigeria. *Canadian Social Science*, 8(4), 249-257. Available from <http://www.cscanada.net/index.php/css/article/view/j.css.1923669720120804.3020> DOI: <http://dx.doi.org/10.3968/j.css.1923669720120804.3020>

INTRODUCTION

Biodiversity which is the short form of Biological Diversity is defined in Article 2 of the Convention on Biological Diversity 1992 as:

The variability among living organisms from all sources including inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; that includes diversity within species, between species and of ecosystems (UNEP Handbook, 2002, p.9).

Until fairly recently conservation efforts were focused on what was otherwise called "wildlife". It was in the 1970s that many biologists became concerned that the focus on wildlife was too narrow, that concern over the fact of cute and ferocious mammals or beautiful birds missed the larger issue of loss in the overall richness of life on the planet (Hunter *et al.*, 2002, p.912). Biodiversity as a concept allows us to recognize and value the great diversity and variability in life. By focusing on biodiversity scientists hope to build political will concerning life (Hunter *et al.*, 2002, p.912). The concept of biodiversity demands equal concern for both ant and

anteater, rhinoceros beetle and rhinoceros (Hunter *et al.*, 2002, p.912).

Biodiversity conservation contributes to environmental sustainability, a critical Millennium Development Goal (MDG) and a central pillar of World Bank assistance (World Bank Portfolio, 2008, p.1).

Until recently, man's relationship with the rest of terrestrial life was best summarized by the biblical dictate: "Be fruitful and multiply and fill the earth and subdue it, and have dominion over the fish of the sea and over the birds of the air and over every creeping thing that moves upon the earth (*The Holy Bible*, Genesis Chapter, 1: 28). In an effort to fulfill the God's command to have dominion over all creatures with a view to enjoying the divine bequeathal of the natural resources, man's activity has threatened different species of fauna and flora (Gasu & Gasu, 2008).

Life on earth is supported by communities of plants, animals, and micro organisms interacting with each other within the ecosystem and with the physical environment (Guruswamy & Hendricks, 2007, p.8). The conservation of Biodiversity is therefore of primary importance as biodiversity sustain life on earth by maintaining atmospheric quality, regulating local climates, absorbing pollutants, protecting water sheds, and generating and maintaining soils (Guruswamy & Hendricks, 2007, p.8).

1. THREATS TO BIODIVERSITY

Virtually all the earth's ecosystems have been dramatically transformed through human actions and ecosystems continue to be converted for agricultural land and other uses. The current loss of biodiversity and the related changes in the environment are now faster than ever before in human history and there is no sign of this process slowing down. Many animal and plant populations have been declined in numbers, geographical spread, or both, species extinction is a natural part of the earth's history. Human activities have increased the extinction rate by at least 100 times compared to natural rate.

At least two-third of all land-dwelling species inhabits the tropical rain forests that are being rapidly destroyed. The Amazon rain forest, the world's richest collection of biodiversity lost 22,600 square miles between 1995 and 1997 (Kwbasek & Silverman, 2000, p.315). As the rain forests are being destroyed, so are the species that inhabit these areas. Estimates of species loss vary, and it could be impossible to know the precise figure, but they range from 4,004 to 17,500 species per year (Edward, 1988). Some current researchers suggest that 15-37% of a sample of 1,103 land plants and animals would eventually extinct as a result of climate change by 2050 (Nature, 2004). Some researchers projected that by the year 2000 we lost more than one million species (Edward, 1988).

In Madagascar, the Philippines and Haiti, approximately 20% of the Bird and Mammal species

were threatened. However, Mauritius, a country in South America, almost 40% of birds and mammals are classified as threatened (Planet Report, 1998).

In Africa, the situation has not been different. The greatest losses are occurring in the tropical forest where most of the various species reside. In Nigeria, "several species of fauna and flora which the nation is naturally endowed with have been rendered extinct or are in danger of the extinction as a consequence of economic growth and development (Planet Report, 1998).

It may be instructive to focus attention on the condition of the Amazon rain forest, as it is the largest and possibly the most threatened. The usefulness of the Amazon basin cannot be underestimated as it contains a large fraction of the world's genetic diversity (Uwuh, 2007 unpublished).

2. CAUSES OF THE LOSS OF BIODIVERSITY

The primary cause of loss of biodiversity is habitat destruction resulting from the expansion of human populations and activities. Among terrestrial ecosystems, the expansion of agriculture and commercial harvesting has led to the destruction of forests, while overgrazing and conversion to agricultural crop land has significantly altered natural habitat (<http://www.bookrags.com/research/the-emergenceofbiodiversity-as-an-Scit07121>). In aquatic ecosystems, dams have destroyed large section of fresh water habitat, while coastal development is responsible for destroying reefs and near-shore marine habitat (Guruswamy & Hendricks, 2007 p.88). Other direct causes include:

2.1 Climate Change

According to the UNFCCC, climate change is "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which in addition to natural climate variability observed over a considerable time period (UNEP, 2007).

A global changing climate threatens species and ecosystems. Many plant and animal species are unlikely to survive climate change; for some species there will no longer be anywhere to live, the Tiger Moth has declined by 44% in the last 30 years which scientists believe is linked to climate change (<http://www.cause-of-loss-of-biodiversity.html>).

The distribution of species (biogeography) is largely determined by climate, as is the distribution of ecosystems and plants vegetation zone (Biomass). Climate change may simply shift these distributions but, for a number of reasons, plants and animals may not be able to adjust. Many scientists fear that by the end of the 21st Century 25% of existing species will be lost (http://www.globalclimate.Umich.edu/global/change/2/current_lecturers/

diversity/biodiversity), it has been observed that:

“Climate change affects the warming and acidification of the global ocean; it influences the earth’s surface temperature, the amount, timing and intensity of precipitation, including storms and droughts. On land, these changes affect fresh water availability and quality surface water run off and ground water recharge and the spread of water borne diseases vectors and it is likely to play an increasing role in driving changes in biodiversity and species distribution and relative abundance (UNEP.,2007).

2.2 Other Causes of Loss of Biodiversity Include:

Table 1
Species Known to Be Threatened or Extinct Worldwide

Types of Species	Number threatened all categories of risks	Number Extinct since 1800	Percent of species that may be threatened
Mammals	1,130	87	26
Birds	1,183	131	12
Reptiles	296	22	3.3
Amphibious	146	5	3.1
Fishes	751	92	3.7
Insects	555	73	0.054
Other Crustaceans	555	73	1.03
Mollusks and Worms	944	303	1.3
Plants	30,827	400	0.054

Source: UNEP 2002.

3. THE LEGAL REGIME FOR THE CONSERVATION OF BIODIVERSITY

The need to conserve nature and to further prevent it from its present roller course slide into the cold winter of oblivion is a categorical imperative. This need cannot be overemphasized if the survival of man and other species on earth is to be guaranteed; life on earth is supported by communities of plants, animals and microorganisms interacting with each other within the ecosystems with the physical environment.

Biodiversity functions in the purification of air and water, modernization of temperature extremes and the force of waves, support of diverse human cultures, detoxification and decomposition of waste, generation and renewal of soil and soil fertility, pollination of crops and natural vegetation, serve as food and medicine, partial stabilization of climate and providing aesthetic beauty and intellectual stimulation that lift the human spirit among others (Hunter *et al.*, 2002, p.920).

The most widespread acceptable definition of the concept of conservation of biodiversity is by the International Union for the Conservation of Nature and Natural Resources (IUCN) in its famous document called World Strategy for Conservation as:

“The management of human use of the biosphere, so that it may yield the greatest sustainable benefits while maintaining its potential to meet the needs and aspirations of future generations(Encyclopedia Britannica, 1990, pp.663-667).”

Conservation is the act of preventing something from being lost, wasted, damaged or destroyed (Oxford Dictionary, 7th ed). It is the supervision, management,

Pollution which significantly led to the reduction, and even extinction of some sensitive species, can in turn lead to destruction of entire ecosystems (Guruswamy & Hendricks 2007, p.87). Another virile cause of specie extinction is the invasion of non-native species; loss of Habitat/degradation/fragmentation coupled with over hunting can also lead to the extinction of species. The introductions of predators, competitors and pathogens into isolated ecosystems pose a serious threat to the survival of native species.

and maintenance of natural resources, the protection, improvement and use of natural resources in a way that ensures the highest social as well as economic benefits (Black, 2004).

The IUCN which is a collaboration organization of almost 200 government agencies and over 700 private conservation organizations published a Red list of species in danger of extinction around the world. The IUCN also advises governments on ways to manage their natural resources and works with groups like the World Wildlife Fund to sponsor conservation projects.

The Nigerian Conservation Foundation has also stated the quest for biodiversity conservation when it stated inter alia:

“Nature conservation is the most important challenge to the present century. Nothing affects the quality of our lives quite like the welfare and state of nature and no future can be quite bleak as one in which the resources, such as plants and wildlife, which are very essential for human survival and development, are increasingly being destroyed or depleted by human carelessness. Put in another form, we all rely on nature for food, water, energy, clothing, shelter, minerals, drugs and more. And we rely on millions of animals and plants species to keep the system that provides those needs in running order. Yet despite this obvious fact, we are destroying the natural world, biting the hand that feeds us, so to speak (NEST., 1991, p.182).”

As a result of heavy hunting for bush meat and partly because of the widespread destruction of Nigeria’s rain forest, a lot of her wildlife have abandoned Nigeria and fled to neighbouring Cameroon and the Republic of Benin for sanctuary (Okorodudu-Fubara, 1998, pp.331-333). The white-throated monkey, which is known to occur nowhere else in the world outside Nigeria and is therefore the only

mammal unique to Nigeria, faces a precarious future (Okorodudu-Fubara, 1998, pp.331-333).

It is to protect this species that the Nigerian Conservation Foundation exists and has been raising money to promote better and widespread understanding of the concerns and relevance of conservation (NEST, 1991, p.182).

3.1 International Regimes for the Conservation of Biodiversity

As a result of massive extinction of biodiversity, legal protection is thus imperative both at the global and National levels to ensure continuous existence in this only life sustaining planet.

3.1.1 Convention on International Trade in Endangered Species of Wild Fauna And Flora

One of the productions of IUCN was the International Treaty commonly referred to as CITES that is Convention on International Trade in Endangered Species of Wild Fauna and Flora which is usually regarded by some as “perhaps the most successful of all international treaties concerned with the conservation of wild life (Heppes & Eric, 1987, p. 22).”

The Convention is designed to prohibit the international trafficking in wildlife species and products that are endangered. Species are listed in appendices I, II and III (Kwbasek & Silverman, 2000). Appendix I species are endangered, and trade in these species will be authorized under only the most extraordinary circumstances. Appendix II contains those species that are not now threatened with extinction but may become so if traded. Appendix III consists of species that a nation protects within its jurisdiction and is seeking the cooperation of other nations to protect those species from exploitation. In the US, CITES is implemented through the Endangered Species Act which is regarded by many as the most stringent environment Statute in the World (Ibid). Under the CITES a paper trail is established for all allowable trade in protected species, and any trade without proper documentation is considered illegal under this treaty (Guruswamy & Hendricks, 2007). This treaty still exhibits loopholes as species are still being traded as there is inability of parties to file reservations against the listing of species (Ibid).

3.1.2 Convention on Biological Diversity (CBD) 1992

Another landmark treaty to tackle environmental issues and especially biodiversity was the United Nations Conference on Environment and Development (UNCED) wherein more than 100 world leaders and 30,000 other participants from about 150 countries met at Rio de

Janeiro, Brazil in 1992. The World Summit produced a five fold resultant effect including the Rio Declaration on Environment and Development (ILM., 1992) Agenda 21 (UN Doc A/CONF. 1992), the Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests (Ibid), the Ceremonial Signing of the United Nations Framework Convention on Climate Change (UNEP 1987) (UNFCCC) and the Biological Diversity Convention (CBD) (ILM 1992).

Thus, one of the resultant effects of UNCED central to this study was the Convention on Biological Diversity (CBD); the most ambitious of the nature conservation treaties signed in Rio de Janeiro by the representatives of 150 States on June 5, 1992 and it came into force December 29, 1993.

The UNEP Governing Council has since 1987 asked an ad hoc working group to “explore the desirability and possible form of an umbrella convention¹ to rationalize current activities” to consolidate the existing treaties on biodiversity conservation and to eliminate jurisdictional overlap and filling perceived gaps. The CBD succeeded to do this as it is a framework treaty which possesses only the power to seek “appropriate forms of cooperation” with the executive bodies of other biodiversity conventions (UNEP Res. 1987).

The framework Convention (Rio Declaration, 1992) is rooted in two overriding principles of Equity and Resource Transfers and Sustainable Development (Conservation and Sustainable Use). The two principles are bound together by a third principle known as Common But Differentiated Responsibility (CBDR). CBDR links equity and sustainable development together by contemplating resource transfers such developed countries acknowledge the responsibility that they bear in international pursuit of SD in view of the pressures their societies place on the global environment and of the technologies and financial resources they command. CBD is a framework convention because it contains primarily aspirational provisions, with matters of substance left to future development by its own Conference of the Parties (COP).

The convention centers on the conservation of biodiversity and the sustainable use of species.

In implementing sustainable development under the CBD the focus is on national action. In line with the convention, all parties must develop “national strategies, plans or programmes for the conservation and sustainable use of biodiversity.² Equally each party whether developed or underdeveloped States must integrate these approaches

¹ Articles 22(1) and 23(4) h) of the Convention on Biological Diversity 1992.

² Article 6(a) of the Convention on Biological Diversity 1992.

³ Article 6(b) of the Convention on Biological Diversity 1992.

into other relevant national programs such as forestry and agricultural planning.³

More specifically, with respect to the conservation of in situ biodiversity that biodiversity in its natural setting, the CBD in Article 8 make a number of important mandates. It calls on each contracting State to establish a system of protected areas where special measures need to be taken to conserve biodiversity. In situ conservation means the conservation of ecosystems and natural habitats and the maintenance and recovery of viable proportions of species in their natural surroundings, where they have developed their distinctive properties (Guruswamy & Hendricks, 2007, pp.100-102). Responding to Articles 19(3) and 8(g) the parties at COP II also committed themselves to the development of a Protocol on Bio-Safety, recognizing that the advent of biotechnology may have adverse environmental impacts on the conservation and sustainable use of biodiversity.⁴

Though the CBD laid emphasis on in situ conservation as the primary means of protecting biodiversity, a number of ex situ provisions also exist. Article 9(d) enjoins each contracting party “as far as possible and appropriate and predominantly for the purpose of complementing in situ measures to “regulate and manage collection of Biological resources from the natural habitats for ex situ conservation purposes so as not to threaten ecosystems and in situ populations’ species.”⁵ Ex situ conservation involve preserving living species or genetic materials in gene banks, zoological gardens, botanical gardens and sites other than their natural habitats.

In accordance with Article 10, parties must also incorporate a consideration of sustainable development into their national decision-making, protect traditional cultural uses of biological resources and encourage cooperation between the public and private sectors.

Relationship Between CBD and Other Conventions

Before the CBD there were already many international as well as regional treaties in existence on biological diversity. According to Guruswamy, L. and Hendricks, B. (2007, p.105-106), the CBD would trump all other treaties including the WTO (formerly GATT) where the exercise of rights under those treaties “would cause serious damage or a threat to Biological diversity”.⁶ The exception to this is in regard to the marine environment, in which the rights and obligations of the CBD may not conflict with those created by the United Nations Convention on the Law of the Sea (UNCLOS III).⁷ Thus, in effect there are 2 dominant environmental treaties dealing with Biodiversity: the CBD and the UNCLOS for marine biodiversity.

As a way of global response to curb biodiversity in 2002, parties to the CBD committed themselves to actions to achieve by 2010, a significant reduction of the current rate of biodiversity loss at a global, regional and national levels as a contribution to poverty alleviation and to the benefit of all life on earth.⁸ There was no such significant improvement due to the looming climate change that affected many species.

3.1.3 The United Nations Convention on the Law of the Sea (UNCLOS)

The 1982 UNCLOS III ratified at Montego Bay, Jamaica, on the 10th of December, 1982 which entered into force November 16, 1994, is the strongest comprehensive environmental treaty now in existence or likely to emerge for quite some time. In fact it is the constitution of the Oceans, and the character and reach of its 59 provisions obligating environmental protection and conservation. The UNCLOS III is an umbrella Convention and brings other international rules, regulations and implementation bodies on the conservation of marine biodiversity under its canopy (Birnie & Boyle, 1992, pp.14, 33, 336). Thus we now in effect have 2 dominant environmental treaties dealing with Biodiversity: The CBD for terrestrial biodiversity and UNCLOS for marine biodiversity (Guruswamy & Hendricks, 2007, p.106). The UNCLOS III delineates 4 zones that is the Territorial Sea, Exclusive Economic Zone (EEZ), the Continental Shelf and the High Seas with different regimes for the protection and conservation of marine living resources.

3.1.4 Other Legal Regimes on Biological Diversity Conservation

The 1972 UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) signed in Paris November 16, 1972 and entered into force December 17, 1975.

The 1971 Convention on Wetlands of International Importance especially as Waterfowls Habitat (Ramsar Convention) signed at Ramsar, Iran 1971 and entered into force December 21, 1975.

The 1979 Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) concluded at Bonn June 23, 1979 and came into force November 1, 1983.

The 1946 Whaling Convention signed in Washington December 2, 1946 and entered into force November 12, 1948.

The Brundtland Report of the WCED 1987 which epitomized the correlation between Poverty and the Environment. It is also the root of the United Nations

⁴ Report of the Open Ended Ad Hoc Group on Bio-safety, UNEP/CBD/COP/2/7.

⁵ Article 9(d) CBD.

⁶ Article 22(1).

⁷ Article 22(2) UNCLOS 21 I.L.M. 1261 signed December 10, 1982 and entered into force November 16, 1994.

⁸ Decision Vi/26 CBD Strategic Plan.

Conference on Environment and Development that gave birth to the CBD 1992.

The Millennium Development Goals (MDGs) adopted in New York, USA in 2000.

4. THE NIGERIAN PERSPECTIVE OF BIODIVERSITY CONSERVATION

Nigeria is an independent State of the British Commonwealth in West Africa bordering the Gulf of Guinea with a total land mass of 923,788 square kilometers and a total population of about 150 million. Nigeria is reputed of being the most populous country in Black Africa (Olong, 2008, p.83). The Biodiversity status reveals a total of 5,081 plant species, 22,090 animal species, of which 20,000 are insects and 487 species of microorganisms (Development in Nigerian Federal Protection Agency, 1992, p.5). Over the years Nigeria has not reaped the benefits of the rich resource endowment staying below its potential (Fagbohun, 2002, pp.25-26). In recent years there has been increasing deforestation, soil degradation and deterioration, and desertification in Nigeria which has greatly affected biodiversity conservation. There is need to secure development while at the same time sustaining the productivity of the natural vegetation, protecting wildlife, maintaining genetic diversity and avoiding forest and soil destruction (National Policy on Environment, 1989, Para. 3, 4).

The legal framework for the conservation of Biodiversity and implementation of the various legislations – national and international with respect to biodiversity conservation in Nigeria as in other climes is hinged on Federal Enactments with subsidiary instruments as well as State laws since each State appears autonomous within the sphere of its legislative competence. Thus several regimes have been put in place domestically to cater for the peculiar nature of the Nigerian vast biodiversity. These include:

4.1 Endangered Species (Control of International Trade and Traffic) Decree, 1985

This is the decree put in place to implement the 1973 Convention on International Trade in Endangered species of Fauna and Flora⁹ coupled with other commitments in the African Continent such as the African Convention on the Conservation of Nature and Natural resources, 1968¹⁰ and the Agreement on the Joint Regulation of Fauna and

Flora on the Lake Chad Basin¹¹.

The purpose of the decree is to enact law as required under certain international treaties to which Nigeria is a signatory, to give municipal effect to these treaties and agreements. The decree provides for conservation and management of Nigeria's wildlife and the protection of her endangered species in danger of extinction as a result of over exploitation (Okorodudu-Fubara, 1998, pp.353-354). According to an erudite scholar Professor Okorodudu-Fubara, the decree is a significant statutory landmark in giving legislative effect to government's wildlife conservation policy by effectively prohibiting and regulating specific activities relating to wildlife in the country¹³.

Under the Decree Animals are classified or listed in Schedule I and II. The animals considered to be endangered are listed in Schedule I to the Decree and International Trade in these animals is absolutely prohibited. Such animals include: Cheetah, Wild Cat, Spotted Hyena, Gorilla, Dolphins, Whales, Nile crocodile, Chimpanzee, Short-nosed crocodile, Addax, Seals, etc.. While those listed under Schedule II can be traded with under license from the appropriate Management authorities. Such animals include: All Mongooses, Hippopotamus, Vultures, Galagos, All Monkeys, Fennec, All foxes, etc..

The hunting or capture of or trade in animal species which are threatened with extinction as specified in first schedule to the decree is subject to an approval license by the Minister. Equally S. 4(1) (a) and (b) of the Decree empower the Minister to alter by an order published in the Gazette, the list of animals listed in Schedule I and II by way of addition, substitution. The minister is to make different provisions in relation to different species or as respect importation, exportation or re-exportation of animals and plants from Nigeria and impose such conditions as he may deem necessary¹⁴. The decree equally in S. 5(5) prohibits certain fishing and hunting methods.

The Decree is highly criticized because it shies away from using the widely used terms "endangered species" and "threatened species" under its main provisions. It would seem merely described or referred to "endangered species" animal species threatened with extinction. Likewise its counterpart, the United States Statute¹⁵ which was enacted sequel to the CITES.

The Decree has regrettably failed to address some salient issues necessary for the control of extinction

⁹ Nigeria acceded to this treaty on July 1, 1975.

¹⁰ Nigeria acceded to the Treaty on May 7, 1974.

¹¹ Nigeria ratified this agreement in December, 1977.

¹² S. 4 of the Endangered Species (Control of International Trade and Traffic) Decree 1985.

¹³ S. 4 of the Endangered Species (Control of International Trade and Traffic) Decree 1985.

¹⁴ S. 4 of the Endangered Species (Control of International Trade and Traffic) Decree 1985.

¹⁵ Endangered Species Act, 1973 16 U.S.C. which defines endangered species in clear terms.

and loss of biodiversity. According to Prof. Okorodudu Fubara, the Decree unlike CITES is the express failure to prohibit or control activities touching on the endangered or threatened plant species either their prohibition, importation or exportation (Okorodudu-Fubara, 1998, p.366). The Minister embedded with authority under S. 4 cannot exercise it in respect of plants as the legislators failed to protect such species. An attempt to do that will be declared null and void by a court of law in Nigeria. The Minister trying to extend decree to cover plant species will be unconstitutional and a usurpation of the legislative power under S. 4 of the 1999 Constitution of the Federal Republic of Nigeria.

NEST has strongly criticized the Degree for its protection of Common Species (e.g. Kites) and the permission to trade under license in endangered species such as Cranes, Secretary Birds and Ostriches. Furthermore the decree does not offer any protection to any of the country's amphibians, although some rare ones are threatened by habitat destruction (NEST., 1991, p.194)

4.2 Reactions to the Convention on Biological Diversity, 1992

The Nigerian Government participated in the United Nations Conference on Environment and Development (the Earth Summit) in Rio de Janeiro (1992). One of the very significant outcomes of that global meeting was the signing of the Convention on Biological Diversity. Nigeria has ratified the convention, thus assuming obligations under the provisions of the treaty and in accordance with customary international law. Article 6A of the Convention requires each contracting State to “develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity, or adapt for this purpose existing strategic plans or programmes which shall reflect, *inter alia*, the measures set out in this convention relevant to the contracting parties concerned.” Since the earth Summit Nigeria has taken a number of significant actions related to the Biodiversity Convention in response to the country's commitments at Rio. A country study on Biological Diversity in Nigeria was published in 1992 (NSAPBC., 1992)¹⁶.

In accordance with Article 8(a) of the CBD each contracting party is to establish a system of protected areas where special measures need to be taken to conserve biodiversity, i.e. Protection in-situ. Some of legislative efforts to protect and conserve in-situ include Forestry laws, Forestry Regulations and National Park Decree 1991 which established 5 national parks — Kainji Lake,

Lake Chad Basin, Cross River, Gashaka-Gumti and Old Oyo National Parks. The Yankari Game Reserve has been elevated to the level of a National Park by virtue of the Yankari National Park Order of 1993.

The objectives of the creation of the park included *inter alia* to promote the preservation, enhancement, beauty, protection, conservation and maintenance of indigenous flora and fauna resources; to promote their sustained growth for zoological and botanical specimen. Protection Ex-situ: Article 9(d) of the CBD enjoins each contracting party “as far as possible and as appropriate and predominantly for the purpose of complementing in-situ measures”, to regulate and manage collection of biological resources from natural habitats ex-situ conservation purposes so as not to threaten ecosystems and in-situ population species”. Ex-situ conservation involves preserving living species or genetic materials in gene banks, zoological parks, botanical gardens and sites other than their natural habitats. The 1991-1992 country study on Biological Diversity in Nigeria identified not less than 51 existing ex-situ sites in the country made up of private wildlife sanctuaries, zoos/zoological gardens, botanical gardens/arboreta, museums, herbaria and aviaries.

Legal coverage of this area is still rather weak and is an area that needs to be addressed in keeping with Article 9(d) of the CBD (Okorodudu-Fubara, 1998, pp.342-343).

4.3 Kainji Lake National Park Decree 1979 (Subsumed in National Parks Decree) 1991

The Government declared that the purpose of this decree was to establish the Kainji Lake National Park (KLNPD)¹⁷ to establish a Management Board for the Control and Management of the Park and also to make necessary legislative provisions for the protection of objects of aesthetic and historic interest and the conservation and protection of vegetation and wildlife within the Park. According to the Learned Professor Okorodudu-Fubara (1998), the Decree, in itself is a brief capsule of the government's policy to seek to conserve the nation's natural resources and especially the endangered species and threatened species.

The affected areas include pieces of land known as the “Doro River Forest Reserve” (KLNPD, 1979)¹⁸ “Central Borgu Forest River (KLNPD, 1979)¹⁹ and Zugurma Forest Reserves²⁰ are described as Schedules 1, Schedule 2 and Schedule 3 of the Decree respectively. The Decree in S. 9(1) outlaws hunting, killing, injury,

¹⁶ The National Strategy and Action Plan for Biodiversity Conservation 1992.

¹⁷ The KLNPD is made up of land – mainly forest reserves – which cut across Kwara State and Niger State.

¹⁸ Kainji Lake National Park Decree 1979 S. 1(a) (2).

¹⁹ S. 1(a) (ii) Ibid.

²⁰ Ibid. S. 1(1) (b).

capturing or disturbing of any wild animal, reptile or fish or damage within the Park of any object of archaeological, geological, prehistoric, historic, aesthetic or scientific, etc. except with the lawful issuance of permit²¹.

Anyone liable under S. 9(1) or (2) of restriction, hunting shall on conviction shall pay a fine of not less than ₦1,000.00 or imprisonment for a term not exceeding 5 years or to both.

Other Laws in Nigeria with a bearing on Biodiversity Conservation:

Nigeria is a signatory to the 1982 UNCLOS III which bestow on her the right not only to exploit but also to manage and control the exploitation of the marine living resources in the marine environment.

Decree no. 50 of 1989 that created the Natural Resources Conservation Council of Nigeria (NARESCON).

Sea Fisheries Act Cap 84 LFN 2004²².

CONCLUSION/RECOMMENDATIONS

The contemporary world recognized that natural resources must be used on a sustainable basis and not over exploited in such a way as to degrade the environment and deplete than in a manner against the interest of future generation. Biodiversity conservation must necessarily be premised on the recognition of the fact that biodiversity as stated in the preamble of the CBD affirms that “the conservation of biological diversity is a common concern of mankind” as biodiversity is deemed as a common heritage of human kind. The use and consumption of natural resources must not be permitted to reach unsustainable levels. Environmental conservation must include effective and efficient management to avoid its present roller coast slide into the cold winter of oblivion.

We will like to conclude in the words of the World Charter for nature thus: “Every form of life is unique, warranting respect regardless of its worth to man, and to accord other organisms such recognition, man must be guided by moral Code of Conduct” (Preamble World Charter for Nature, 1982).

It is our theses that biodiversity should be properly conserved and managed as it can reduce the impact of climate change. The link between biodiversity conservation and climate change is both ways as the Millennium Ecosystem Assessment ranks Climate Change among the main direct drivers affecting ecosystems. There should be education and awareness creation on climate change among governments, institutions and individuals should be viewed as a necessary step in promoting

mitigation and adaptation to climate change. Vulnerability to climate change can be exacerbated by other stress such as loss of biodiversity, damage to ecosystems and land degradation. The protection, restoration of natural habitats and for establishment of biologically diverse ecosystems may constitute important measures to curb climate change.

Afforestation and preservation of forests must be encouraged. There should be the planting of trees on vast land and the preservation of existing forests to serve as a sink to contain the CO₂ in the atmosphere. The Federal Government of Nigeria’s ratification of the UNCCD in 1994 and its subsequent creation of the Climate Change and Desertification Commissions couple with the commitment since 1999 in the tree planting campaign under the theme “a tree for democracy is a clear indication that we will survive the environmental scourge of our times”.

The emergence of global institutions such as the World Bank and the numerous NGOs with an environmental mandate coupled with international and national legal regimes on biodiversity conservation is a start of a fight for environmental restoration. Equally the Local Governments should queue after the States in participating in biodiversity conservation. Similarly educational institutions, public companies and individuals should get involved in biodiversity conservation by growing trees around their compounds.

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²¹ S. 9(3) and (4).

²² With its subsidiary legislations as: (i) Sea Fisheries (Licensing) Regulation which revoked the Sea Fisheries (Licensing/Regulations 1971; (ii) Sea Fisheries (Fishing Regulation) which came to force 17/12/1992; (iii) Sea Fisheries (Fish Inspection and Quality Assurance) Regulation 13/11/1995.

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